

ART. VI.—*Excision of the Cervix Uteri for Carcinomatous Disease.*—By WASHINGTON L. ATLEE, M. D., Professor of Medical Chemistry in the Medical Department of Pennsylvania College, Philadelphia.

Nov. 11, 1846, I was requested to visit Mrs. W., a lady 46 years of age, whose husband is still living. She has had nine living children, the youngest of whom is twelve years old, and one miscarriage—the first gestation—when about three months advanced. She has always been regular in her menstrual periods until September, 1845, after which menstruation ceased. She subsequently became annoyed by a troublesome leucorrhœa, which continued all winter, occasionally being tinged with blood and matter. Early in April, 1846, after having been much fatigued by a long walk, she was attacked with violent uterine pains and copious hemorrhage, which forced her to bed. She kept her bed about one month, during the time suffering greatly, and becoming very much reduced in flesh and strength. She could now discover, by introducing her finger, something like a tumour in the vagina. After this attack, she again recruited her general health, but in the latter part of June, was again prostrated by bleeding, at which time she passed from the vagina something which, she said, resembled a portion of hollow skin about the length of the finger. The bleeding again ceased, but again recurred upon using injections prescribed by her physician. The case now assumed so serious an aspect that she came to Philadelphia for professional advice.

I examined the patient for the first time, on the day above stated, by the toucher, and again, on the 15th of the same month, by the speculum. My opinion of the case was requested by the husband to be given in writing, in order that it might be submitted to her physicians at home, and is as follows:—

“There is, in my opinion, a tumour, about two inches in diameter, of a flesh-colour, seated upon the posterior lip of the os uteri, and appears to have originated on its inferior border, and, developing itself towards the vagina, has extended the lip forwards and backwards, so as to invert the edges, without appreciably disturbing the integrity of the mucous tissue covering the anterior and posterior surfaces. The whole lower aspect of this tumour is ulcerated and covered with semi-botryoidal projections, which bleed upon handling. The tumour is seated upon a dense tissue, which dense tissue does not implicate the walls of the uterus, nor any point above the insertion of the upper part of the vagina. The uterus is retroverted, its body being easily felt, and capable of being well examined *per rectum*. The anterior lip of the os tincæ, the vagina throughout its whole extent, the ovaries and broad ligaments, are free from disease. No glandular enlargements are discoverable in the pelvic cavity, in the groin, or elsewhere, and the external genitals are healthy. There is no fetid discharge, no sharp lancinating pains, no constitutional symptoms. On the contrary, Mrs. W. appears in excellent health, enjoys refreshing sleep and good appetite, and is free from much suffering. The pulse is soft, full, and open, ranging between 80 and 90 when free from nervous excitement; its highest point, during the agitation antecedent to an instrumental examination, being only 104. The tongue is very slightly furred, and moist. The skin soft and moist—of good colour and temperature. Expression of countenance calm.

“Viewing these symptoms collectively, I consider Mrs. W.'s case one purely of ‘*carcinomatous ulcer*,’ in which the hardening of the tissue is consecutive to the existence of the ulceration, and not a case of ‘*ulcerated*

scirrhus, or '*ulcerated cancer,*' in which the hardening of the tissue *precedes* the ulcer. This is a distinction of the utmost importance in deciding upon the propriety of any course of treatment, surgical or otherwise. [Vide *Colombat on Diseases of Females*, by Charles D. Meigs, M. D., 1845, p. 327.]

"Colombat says, 'a cutting instrument, under these circumstances, [*i. e.* in *carcinomatous ulcers,*] can always cut beyond the limits of the disease. It is in this condition, more than any other, that the operation is called for, and promises the best chance of success; because the ulceration, which has been developed from without inwards, reposes upon a secondary induration of no great depth.' [p. 328.]

"With this view of the nature of her disease, associated as it is with very favourable symptoms, appearing, indeed, as a local affection, I consider that an operation for the excision of the diseased structure perfectly justifiable, and affording, at this stage of its progress, the only chance of escape.

"The operation is not likely to be a very painful one. It has its dangers: bleeding from the wound, inflammation of the womb and its appendages, inflammation of the peritoneum, nervous shock, and lastly, the reproduction of the disease. The first four, although more or less dangerous, are within the power of remedial treatment, and every day's delay increases the hazard of all.

"Should Mrs. W., after weighing carefully all the circumstances connected with her case, and with the operation, conclude to avail herself of this last resource, and desire me to undertake her case, I shall feel bound, under this opinion, by a conscientious regard to professional duty and to the welfare of the patient, to accede; and I sincerely hope, through the blessing of God, that the means may prove successful.

"WASHINGTON L. ATLEE, M. D.

"Philadelphia, Nov. 17, 1846."

December 1st. The patient was taken to New York with the hope of getting relief, without resorting to surgical interference, and, after spending eight or nine days there, returned completely disheartened and unnerved. She had had severe floodings, was now much worse, and was suffering considerable gastric distress, and agony through the pelvic region.

11th. Dr. George McClellan examined the patient in consultation, and, agreeing in every particular with the above opinion, recommended the resort to the knife.

The same evening the patient sent for me, stated that she had weighed the matter well, had decided upon the operation, and desired me to perform it, wishing, at the same time, not to be informed of it until the day fixed for it. Pulse 84.

15th. The gastric disturbance was increased: there were considerable nausea and efforts to vomit. Pulse ranging from 88 to 104.

16th. Dr. Samuel G. Morton was now associated in the consultation. He examined the patient, and coincided with us in opinion as to the character of the disease and the propriety of an operation. Agreeably to a mutual understanding, the general health was now placed under Dr. Morton's special charge.

21st. The patient, having just passed through what was supposed to have been a menstrual period, and having recovered from the unpleasant symptoms mentioned, was considered in a proper condition for the operation, and accordingly I announced to her my intention to operate this morning at eleven

o'clock. She desired to have it postponed until to-morrow, but upon urging it upon her, she readily yielded to our decision.

The patient was placed upon a bed, her hips resting on its edge, in the position as for the operation of lithotomy, and well supported by assistants. Drs. George McClellan, Morton, Sharpless, Gilbert, Wiltbank, Grant, and Jno. McClellan, and several female friends, were present. With a forceps* constructed for the purpose, I seized the two opposite sides of the base of the tumour near the insertion of the vagina into the cervix uteri, and making gentle, but continued traction in the direction of the os externum, brought the posterior border of the tumour in sight. Its anterior part being still under the arch of the pubis, I gave the handle of the forceps into the hands of Dr. George McClellan, and applied the double-branched tenaculum high up on its anterior face, and brought that portion of the tumour down. Firmly maintaining the parts in that position, I now with my left index finger accomplished the delivery of the whole mass through the os externum. Dr. McC. taking charge of both traction-instruments, I seized a probe-pointed bistoury, wrapped for about two-thirds its length, and cut above the insertion of the forceps, from before backwards towards the perineum, guiding the knife and guarding the parts with the left index finger, until I made the section complete, and severed, by a horizontal cut, the whole of the diseased mass.† The uterus at once receded. The parts were now carefully examined by the eye, and no diseased structure appearing, a dossil of lint, charged with a powder composed of galls, tannin, and gum-Arabic, was passed up to the cut surface of the uterus, a tampon of soft lint introduced, and the whole retained by a T bandage.

The section of the cervix did not resemble the cutting of scirrhus, but more that of the ordinary tissue of the uterus, and the structure cut seemed to be perfectly healthy, both in feel and appearance. Very little hemorrhage occurred—only one small artery spouted out, too insignificant to require attention, or to excite alarm. Nor was there any venous sinus opened.

The operation lasted four and a half minutes, and was borne by the patient with very little manifestations of pain—the most suffering having been produced by dragging down the uterus. No gastric disturbance was excited by these efforts, and the amount of force required to accomplish this object was much less than had been anticipated. Forty drops of black drop had been administered two hours before the operation, and fifteen more just before the patient was brought into the operating room. The

* These forceps are eight inches long, have scissor-handles, and a loose conical-pivot joint, similar to that in Siebold's obstetric forceps. The joint is placed at three and a half inches from the extremity of the handles, and from this point the blades are tapering and round, and curve gently upwards. The blades continue parallel to each other for five and a half inches, then curving outwardly, become flattened, and again meet in serratures at their extremities, which have a perpendicular width of half an inch. The forceps, when closed, therefore, forms, at its distal extremity, an oblate-spheroid, of one inch and a half conjugate diameter.

By this arrangement I was capable of introducing the blades separately, and of fixing their teeth upon any part of the pedicle of the tumour, and then locking them, I could firmly secure the diseased mass in the ellipsoid. The instrument answered an admirable purpose. It is far superior for this operation to the forceps of Museaux, and much more simple than that recommended by Colombat.

† The portion removed, it was thought, by those present, would weigh five or six ounces. A wax model was taken of it, and is in the museum of the Medical Department of Pennsylvania College.

bowels had been opened in the morning, and the bladder emptied just before the operation.

The patient was now conveyed to her room on the same bed used for the operation. A tendency to syncope followed, and arrow-root and brandy were exhibited. The extremities and surface became cold, the pulse feeble, and there were efforts to vomit. Aqua ammonia, in ten drop doses, was given at intervals, with brandy, arrow-root, and toast water. They were again rejected after accumulating, accompanied with the discharge of considerable flatus from the stomach at the same time. In taking drink, every swallow was followed by borborygmus.

These symptoms continued until about four o'clock, P. M. After this, there was very little gastric distress, the pulse began to be felt more sensibly, and the skin became warmer, the nose still remaining cold. The stimulants were now suspended, and cold water in teaspoonful doses substituted. The most distressing symptom now complained of, and which annoyed the patient from the beginning, was a strong desire to urinate, and this was supposed to be owing either to the styptic or the tampon. 7 P. M. Considered to be doing well. Had her lifted on to her own bed. Complains of cold feet. Relishes sago. 10 P. M. Has been quite calm for several hours, dozing some. Stomach quiet. Felt a little chilly, but asks occasionally to be fanned. Has some thirst, which is easily satisfied. Nose now warm, and reaction appears perfectly established. Pulse has ranged between 90 and 98, and is acquiring more volume. There has been no hemorrhage—a little bloody serum stained the cloths. Turned the patient upon her right side.

22d. 3 A. M. Complains of pain in the lower part of the abdomen, which was, in a measure, relieved by removing, with the catheter, about four ounces of healthy-looking urine, the first passed since the operation. Hands a good deal warmer; pulse 108, and fuller. Removed a portion of the lint from the vagina, which had dried, and adhered to the labia. Gave 5i spts. nitr. dulc., and, about an hour afterwards, ten drops of M'Munn's elixir of opium. 9½ A. M. Has had altogether a comfortable night—as much so as usual—troubled occasionally with colic pains, which she is liable to. Pulse 88. Two hours after this, I removed a portion of the tampon, and injected the vagina with warm flax-seed tea. Removed six ounces of healthy urine. 1 P. M. Enema of flaxseed tea, followed by a suppository of soap, and by saline injections. Complains of a tender and painful spot in the left groin, which has troubled her a long time before the operation. Applied a warm emollient cataplasm to the abdomen. 10 P. M. Found the patient in much pain and agitation, in consequence of an accumulation of urine. Relieved by catheter. Afterwards, I withdrew the balance of the tampon, which had become very hard and consolidated, and washed out the vagina well with flaxseed tea. Administered fifteen drops of elixir of opium, which soon made her quiet and easy. Enema operated about 4 P. M. Pulse to-day, 88—98. Tongue rather more coated, but moist. Less thirst.

23d. 7 A. M. Has had a most delightful night; sweet and refreshing sleep. Free from pain and soreness. Feels very comfortable, and says she is much better. Pulse 88. Used catheter. The serous discharge from the vagina more copious. Vaginal injections. Ordered thin chicken-broth. 4 P. M. Has had some chilliness; is now feverish; pulse 104; skin warm and dry. Lifted the patient to another bed. Had her clothing and bed changed. Says she is more comfortable. Used catheter; also

at 1 P. M. Urine containing a deposit of mucus. Ordered 5 grs. *cryst. bicarb. pot.* every two hours. Vaginal injections of a solution of the hypochlorite of lime. 12 M. During the evening, some tenderness over the hypogastrium, and left iliac region. Pulse 115. Catheterism. Much less mucus in the urine. Saline enema brought away feculent discharges, and the tenderness of the abdomen was somewhat relieved.

24th. 5 A. M. Pulse 118. Skin warm and dry. Tongue covered with a dense white coat. Some thirst. Abdominal tenderness the same. Catheterism. Examined per vaginam—not much heat or tenderness of the parts. Continued vaginal injections. Gave two teaspoonfuls of calcined magnesia. 1 P. M. Pulse has come down to 94. Magnesia operated twice, producing large, very feculent discharges; yellowish, and containing scybala. Catheterism. Has felt chilly about the thighs and arms, and complains of headache. 3 P. M. Considerable fever following the chill. Pulse 120, full and rather hard. Skin dry and warm. Complains of headache and burning heat. Venesection until skin was relaxed, and pulse softened, requiring about eight ounces of blood. Followed by fifteen drops of elixir of opium. Discharge from vagina less sanguineous. Catheterism. 7 P. M. Very comfortable since, excepting a transient neuralgic pain attacking the two elbows, and which was relieved by a rubefacient. Pulse 110, soft, full and open. Skin rather relaxed; soft. Temples moist. 12 M. Rested well all evening: tenderness of abdomen much diminished. Catheterism and vaginal injections.

25th. 9 A. M. Has passed quite a comfortable night. Passed urine without the catheter with little effort, and with no pain. Pulse 104; soft. Skin soft and pleasant to the touch. Tongue slightly furred and moist. Says she feels well. Assists herself better, and has very little soreness of the abdomen. 10 P. M. Has complained much this evening of pain in the head.—Pulse 120, but soft. Skin soft. Drew about four ounces of blood from the temples by leeches. Pulse fell afterwards to 100. Entire relief to head, and feels very comfortable. Catheterism.

26th. 9 A. M. Found the patient taking her own breakfast, with the table at her bedside. Had a very comfortable night; slept all night; pulse 100. 9 P. M. Pulse 92—98. Had a slight paroxysm of fever this afternoon, which appears to be periodical. Ordered 1 gr. extract of bark [Wetherill's] every two hours, when free from fever.

28th. 10 A. M. Patient did not sleep much last night; complains of uneasiness in the head, left hip and groin; but has a warm moist skin, and moist tongue, and pulse ninety-two. The stomach has been quite irritable since 5 A. M.; vomiting at times greenish mucus, and distressed considerably with nausea. The abdomen is soft, not distended, free from pain and soreness. The irritability of stomach was supposed to be owing to some badly cooked prunes she had eaten the day before yesterday. Catheterism. Applied a spice plaster to the gastric region. Ordered a teaspoonful of magnesia in camphor water, wine whey, and occasional doses of aqua ammonia. 2 P. M. Gastric distress diminishing. Enema brought away some feculent discharge, containing prune skins. Skin moist and warm; pulse 94. Ordered two teaspoonfuls of magnesia. 9 P. M. The gastric disturbance has been gradually subsiding, and is now entirely gone. Has had several discharges from the bowels containing prune skins. Complains of some disturbance of the head, and good deal of heat, there being slight febrile excitement. *Note.* The patient had taken a dose of elixir of opium soon after having eaten prunes, which is supposed to have suspended diges-

tion. Being retained in the stomach and bowels, they were a source of irritation until discharged by medicine.

29th. 9 A. M. Has had a comfortable night. Bowels opened; no further evidence of undigested prunes. Pulse 90, soft; skin good; tongue moist and less furred. Complains of some confusion of head. 9 P. M. Pulse 87—100. Passed a good day; washed out the vagina with flaxseed tea and creasote, which brought away several small particles of dead tissue imbedded in muco-purulent discharge. A teaspoonful of the following mixture was ordered every two hours. R.—Emuls. acac. arab. ℥j; pilul. cærul. grs. iv.—M.

30th. 10 A. M. Rested tolerably well last night without an anodyne, excepting that she had a feeling of pressure on the bladder and a desire to urinate oftener than usual. Pulse 88—94; skin soft; tongue cleaner; washed out of the vagina more of the sphacelated tissue. Catheterism. Complains of cerebral disturbance. Ordered blisters behind the left ear. 9 P. M. Head and bladder better. A discharge of laudable sanguinolent pus.

Jan. 2d, 1847. 10 A. M. Has been getting along very well. Examined the wound with the speculum for the first time since the operation, Dr. Morton being present. The uterus is more elevated than before, the cut surface looks quite healthy, and is coated with lymph, and the lining membrane of the vagina has a healthy aspect. A slight abrasion of the wound was made by the speculum.

3d, 10 A. M. Passed a restless night in consequence of a noisy house [hotel]. Feels weak and exhausted. Ordered one grain of citras quin. et ferri three times a day, and occasional doses of assafetida.

8th. Examined the wound, is in good condition. Has used animal food daily for the last week.

11th. Wound looks well. Applied nitrate of silver to induce more rapid cicatrization. Dr. McClellan present.

14th. Patient has been sitting up these two days. Examined per vaginam et rectum. The uterus still somewhat retroverted.

16th. Wound looks healthy. Applied nitr. arg.; and again on the 23d.

31st. Up to the present date, I washed out the vagina myself daily with flaxseed tea and a solution of creasote. After this it was attended to by the nurse.

Feb. 2d. The application of the caustic to-day was accompanied with some bleeding. Supposed menstruation.

5th. Some sanguineous discharge from the vagina, which, having been preceded and accompanied by the ordinary menstrual symptoms, was considered as catamenial.

8th. Examined per vaginam by the toucher. The finger was stained with blood. The cut surface felt smooth and even.

14th. Examined through the speculum. The surface of the wound was disposed to throw out granulations, which, however, had a healthy aspect, but were too much elevated in the centre of the wound. Slight bleeding while examining.

17th. Examined the wound with Dr. McClellan. Its surface was becoming more prominent. The speculum employed to-day was glass, and was made by cutting a conical lamp chimney into sections of about four inches long, which answered the purpose admirably. While the speculum was in situ, the surface of the wound was well covered over with the acid nitrate of mercury, afterwards penciled with a stick of vegetable caustic,

a portion of which was also powdered and passed up against it upon some lint. The speculum was now stuffed with charpie, and the whole retained in position by the T bandage for about four hours.

18th. Examined the wound. Surface remained coated with caustic. Dr. Morton present.

24th. The granulations have increased; the wound has become more elevated in the centre, so as to make a rounded projection. Drs. McClellan and Morton being present, it was agreed to apply the caustic more effectually. In using the vegetable caustic this time, I continued applying the stick to the parts until it was melted down to a very sharp point. By means of this point I was able to penetrate into the substance of the structure just as readily as with the knife, and I continue to do so until I had completely disintegrated the whole of the diseased surface. The vagina was perfectly protected by means of the speculum. The speculum being stuffed with lint, it was retained for several hours by the T bandage. The lint having been first withdrawn, and the parts well syringed off with vinegar and water, the speculum was removed. In neither application of the vegetable caustic was there much suffering.

28th. Complains of considerable soreness of the vagina. Examined it; found it a good deal inflamed. An injection of a solution of sugar of lead and opium was used every two hours until it was relieved.

March 3d. Examined per vaginam. Inflammation much relieved. The lower surface of the uterus covered with sloughs, and the granulations all destroyed.

10th. The patient has been attacked with acute inflammation of the right kidney. She says that this is the third time that she has been so affected, twice previously to the operation. Cupping and leeching relieved her very much. Sloughing of the wound is going on well.

11th. In consequence of the uterus having become quite elevated, and the vagina contracted and elongated, the nurse could not so satisfactorily syringe off the sphacelating surface of the wound. I therefore again attended to this matter personally, and daily washed the wound through the speculum, and also detached the sloughs by means of the forceps as they became looser.

22d. The injections through the speculum have been continued daily. Sphacelation is nearly completed, the wound being nearly clean. There has been no bleeding since the last cauterization. The granulations have not sprung up again. All the parts seem in the most favorable condition. Drs. McClellan and Morton examined the parts with me to-day. All pleased. Applied the nitrate of silver lightly, to favour cicatrization.

25th. Ever since the nephritic attack, Mrs. W. has had something like remittent fever, with paroxysms at night. Her tongue has become red at the point, and is covered with a harsh fur towards the back part. Considerable gastric and intestinal irritation—flatulency—and globus hystericus. The distress being so great to-day, a blister was applied over the epigastrium, and one grain of blue mass was ordered every two hours through the day, and valerian at night.

26th. Much relieved. Passed a comfortable night. We again all examined the wound; looks well. The nitrate of silver was applied to a small raw surface.

There has been a discharge of pure laudable pus from the vagina ever since sphacelation commenced after the last application of the vegetable caustic.

30th. The patient has complained for several days of a very uneasy sensation in the larynx, and has a constant tendency to *screatus* or clearing-out, expectorating occasionally a portion of inspissated mucus. A spot tender to pressure was found upon the right side of the larynx. Ordered a blister as large as a shilling to be applied over it. This drew well, and afforded relief. She also received considerable relief from inhaling the following mixture. R.—Iodin., grs. vj; fol. cicutæ, grs. xij; æth. sulph. rectific. ʒi. M.

April 3d. Examined the wound; looks very healthy. The discharge consists of laudable pus, free from smell. The vagina is perfectly healthy in its aspect; has considerable tone, and is contracted.

14th. The patient was alarmed this evening by a large amount of healthy pus which flowed from the vagina, while in the act of defecating on the chamber. It was explained by supposing that an accumulation of pus had occurred in the upper part of the vaginal tube in consequence of a recumbent posture for forty-eight hours, there being, as it were, a cavity to contain it between the superior termination of the vagina and the body of the uterus in consequence of the absence of the tumour and of the os and cervix uteri.

24th. The wound has been examined regularly every two or three days. To-day Drs. McClellan, Morton, and myself examined it for the last time. The examination was carefully made through the speculum. The wound had a beautiful, smooth, even surface, and perfectly healthy aspect, and appeared covered with a thin epithelium. The os and cervix uteri were absent, and the body of the uterus below was excavated so as to form a hollow cone with apex above. The walls of the uterus, forming the base of this cone, were continued into the upper end of the vaginal tube. The vagina and external genitals were considered in a healthy condition. We severally expressed ourselves gratified with the favourable condition of the parts.

The patient's general health during the winter has not been good. She has been more or less annoyed with neuralgic, rheumatic and dyspeptic symptoms. Her pulse was generally eighty-four, but ranged as above stated. Tongue occasionally reddish at the end and edges, with a whitish fur; generally, however, it looked well. Although evidently cachectic, she is better in these respects, begins to relish food, and is preparing for her journey home to Pittsburgh.

May 4th. Mrs. W. left Philadelphia to return home. On the 8th, a telegraphic dispatch, dated at Pittsburgh, was received, saying that she arrived safely the evening before, was very glad to see her friends, and her friends rejoiced to see her. On the 10th, another message by telegraph made the melancholy announcement that she had died at 9 o'clock the previous evening [Sunday]. A post-mortem examination was immediately requested by telegraph, but was refused.

Remarks.—I offer no comment upon the above interesting case. The account is purely clinical, the notes having been made at the bed-side of the patient, and abridged to suit the pages of the Journal.

I refer your readers to the following authorities on this subject, viz:—*Duparque on the Uterus*, p. 351; *Colombat on Diseases of Females*, Prof. Meigs' edition, 1845, p. 327; *Lee on Tumours of the Uterus and Appendages*, pp. 95–108; *Lever on Organic Diseases of the Uterus*, p. 210; *Ashwell on Diseases of Women*, Goddard's edition, p. 295; *Simpson on Excision of the Cervix Uteri for Carcinomatous Disease*, Braithwaite's Retrospect, American edition, 1847, part 14th, p. 294.